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File: USPT

May 7, 2002

US-PAT-NO: 6385596

DOCUMENT-IDENTIFIER: US 6385596 B1

TITLE: Secure online music distribution system

DATE-ISSUED: May 7, 2002

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APPL-NO: 09/ 020025 [PALM]

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PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4747139</u>	May 1988	Taaffe	380/44
<input type="checkbox"/>	<u>4817140</u>	March 1989	Chandra et al.	705/55
<input type="checkbox"/>	<u>5003410</u>	March 1991	Endoh et al.	360/60
<input type="checkbox"/>	<u>5033084</u>	July 1991	Beecher	705/56
<input type="checkbox"/>	<u>5034980</u>	July 1991	Kubota	713/189

<input type="checkbox"/>	<u>5155768</u>	October 1992	Matsuhara	463/29
<input type="checkbox"/>	<u>5191573</u>	March 1993	Hair	369/84
<input type="checkbox"/>	<u>5199066</u>	March 1993	Logan	713/200
<input type="checkbox"/>	<u>5418713</u>	May 1995	Allen	364/403
<input type="checkbox"/>	<u>5592651</u>	January 1997	Rackman	711/163
<input type="checkbox"/>	<u>5621796</u>	April 1997	Davis et al.	380/24
<input type="checkbox"/>	<u>5623547</u>	April 1997	Jones et al.	380/24
<input type="checkbox"/>	<u>5636276</u>	June 1997	Brugger	380/4
<input type="checkbox"/>	<u>5661799</u>	August 1997	Nagel et al.	705/52
<input type="checkbox"/>	<u>5673316</u>	September 1997	Auerbach et al.	380/4
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<input type="checkbox"/>	<u>5715314</u>	February 1998	Payne et al.	705/78
<input type="checkbox"/>	<u>5724424</u>	March 1998	Gifford	705/79
<input type="checkbox"/>	<u>5734823</u>	March 1998	Saigh et al.	395/200.06
<input type="checkbox"/>	<u>5734891</u>	March 1998	Saigh	395/610
<input type="checkbox"/>	<u>5742845</u>	April 1998	Wagner	710/11
<input type="checkbox"/>	<u>5745568</u>	April 1998	O'Connor et al.	705/56
<input type="checkbox"/>	<u>5754649</u>	May 1998	Ryan et al.	380/203
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<input type="checkbox"/>	<u>5790677</u>	August 1998	Fox et al.	380/24
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<input type="checkbox"/>	<u>5809144</u>	September 1998	Sirbu et al.	705/53
<input type="checkbox"/>	<u>5857021</u>	January 1999	Kataoka et al.	705/54
<input type="checkbox"/>	<u>5889860</u>	March 1999	Eller et al.	380/4
<input type="checkbox"/>	<u>5892900</u>	April 1999	Ginter et al.	713/200
<input type="checkbox"/>	<u>5900564</u>	May 1999	Kurakake	84/477R
<input type="checkbox"/>	<u>5910987</u>	June 1999	Ginter et al.	785/52
<input type="checkbox"/>	<u>5915019</u>	June 1999	Ginter et al.	705/54
<input type="checkbox"/>	<u>5917912</u>	June 1999	Ginter et al.	713/187
<input type="checkbox"/>	<u>5920861</u>	July 1999	Hall et al.	707/9
<input type="checkbox"/>	<u>5943422</u>	August 1999	Van Wiet et al.	705/54
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<input type="checkbox"/>	<u>6005939</u>	December 1999	Fortenberry et al.	705/76 X
<input type="checkbox"/>	<u>6061448</u>	May 2000	Smith et al.	380/282
<input type="checkbox"/>	<u>6112181</u>	August 2000	Shear et al.	705/1

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<input type="checkbox"/>	<u>6185683</u>	February 2001	Ginter et al.	713/176
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<input type="checkbox"/>	<u>6237786</u>	May 2001	Ginter et al.	213/153
<input type="checkbox"/>	<u>6240185</u>	May 2001	Van Wie et al.	380/232
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0 756 279	January 1997	EP	
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Atwood, Brent, "Liquid Audio gets Dolby license", Aug. 31, 1996; Billboard; New York; vol. 108, Issue 35, 3 pages.\*

Blaze et al., "Decentralized Trust Management," originally published in Proc. IEEE Conference on Security and Privacy, Oakland, CA, May 1996.

Schneier and Kelsey, "Cryptographic Support for Secure Logs on Untrusted Machines," The Seventh USENIX Security Symposium Proceedings, USENIX Press, Jan. 1998, pp. 53-62.

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Digital River, "Technology Solutions to Electronic Transactions: A White Paper," Printed from website <http://www.digitalriver.com/>.

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One-page printed papers from website <http://www.digitalriver.com/> on Digital River's "Mission," "Technology," "Security," "Privacy," and "How It Works".

ART-UNIT: 2131

PRIMARY-EXAMINER: Sough; Hyung-Sub

ATTY-AGENT-FIRM: Ivey; James D.

## ABSTRACT:

A computer implemented online music distribution system provides for the secure delivery of audio data and related media, including text and images, over a public communications network. The online music distribution system provides security through multiple layers of encryption, and the cryptographic binding of purchased audio data to each specific purchaser. The online music distribution system also provides for previewing of audio data prior to purchase. In one embodiment, the online music distribution system is a client-server system including a content manager, a delivery server, and an HTTP server, communicating with a client system including a Web browser and a media player. The content manager provides for management of media and audio content, and processing of purchase requests. The delivery server provides delivery of the purchased media data. The Web browser and HTTP server provide a communications interface over the public network between the content manager and media players. The media player provides for encryption of user personal information, and for decryption and playback of purchased media data. Security of purchased media data is enhanced in part by the use of a personal,

digital passport in each media player. The digital passport contains identifying information that identifies the purchaser, along with confidential information, such as credit card number, and encryption data, such as the media player's public and private keys. The media player encryption data is used to encrypt purchased media data, which is decrypted in real time by the media player. The media player also displays confidential information, such as the purchaser's credit card number, during playback.

25 Claims, 29 Drawing figures

**WEST****End of Result Set**

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TITLE: Secure online music distribution system

US Patent No. (1):  
6385596Detailed Description Text (141):

When a received media data file 200 is to be played back 964 (either immediately or at a later time), the consumer's passphrase is entered. The media player 116 extracts the encrypted registration key 420 from the passport 400 and decrypts it with the passphrase. The media player 116 then extracts the encrypted private key 412 from the passport 400 and decrypts it with the registration key 420. The media player 116 then decrypts the media key with the consumer's private key 412. Finally, the media key is then used to decrypt the audio image 208 in real-time as the media is played.